ABSTRACT OF THE DISCLOSURE

The present invention provides an etching agent that is able to etch a Cu film by a simple chemical etching method such as an immersion method when the low resistance Cu film is used for a wiring material, while allowing time-dependent changes of the etching rate to be small and preventing a pattern narrowing phenomenon ascribed to irregular amount of side etching of the Cu film from occurring, by providing an etching agent comprising an aqueous solution containing potassium hydrogen peroxosulfate and hydrofluoric acid, wherein masks of a give pattern is formed on the surface of a laminated film prepared by sequentially depositing a Ti or Ti alloy film and a Cu film on a substrate, and wherein a gate electrode (a laminated wiring) and a lower pad layer (a laminated wiring) with give patterns are formed by etching the laminated film using the etching agent having the foregoing construction.